

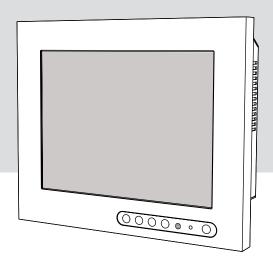
MM-800

8"TFT LCD DIGITAL COLOR MONITOR

INSTRUCTION MANUAL

Thank you for purchasing this product.

For proper usages and application, Please read this instruction manual thoroughly.



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SAFEGUARD INSTRUCTIONS 8"TEL CO DIGITAL COLOR MONITOR

Please read the "Safety Rules" carefully before using this product. Following the safety rules prevents users from damages related with the misuse of the product. It is very important to follow these safety rules. We state "Caution" and "Warning" to clarify any potential risk for a damage associated with the misuse of the product.

CAUTION

This information is for preventing damage or shorten the life time of the products.



This information is for preventing bodily harm or even death and use should follow this safety rules.

A CAUTION



Should install while power off. (After install products, connect DC jack)

- It may cause to electronic shock or malfunction.

0

While stop driving (parking), set the car in motion.

- It may cause battery discharge.

0

Do not use multi socket or extended adaptor.

- It may cause unexpected heating, fire and malfunction.

0

Unplug product when do not use for a long time.

- It may case fire by short circuit due to heating.

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Do not place near magnet.

- It may cause malfunction and trouble.

0

Do not push a LCD panel.

- It may cause LCD broken.

0

In case of inserting battery, attend to polarity and insert according to direction.

- When wrong inserting, it may cause fire, damage by explsion.



Before install the body, take enough place at least more than 15cm from the wall to emit heat.



The battery for remote controller is not rechargeable and should replace same or similar model. Used battery may cause environmental pollution, so trash it carefully.

- This may cause a malfunction and problem.

M WARNING

- Do not put the product in place where sudden temperature increasing and should use on optimum voltage, temperature and humidity.
 - It may cause to electronic shock or malfunction.
- Do not get product wet and operate with wet hands.
 It may cause to electronic shock or malfunction.
- Do not place near of air bag effective range.
- It may cause malfunction of air bag or accident, injury due to hitting monitor by air bag.
- Keep clean dust on power socket.
 It may cause electronic shock and fire by bad connection.
- Do not pull cord with a jerk, should catch a plug and pull. Do not use damaged cord.

 It may cause cord malfunction, electronic shock and fire.
- When clean exterior, power off and wipe with dry cloth.
 Wet cloth may cause a electronic shock.
- Do not clean exterior with volatility or oily solvent.

 Neither keep touching rubber and plastic for long time.
 - It may cause change of surface, fall of paint, malfunction and fire.
- Do not place where vibration and shock.
 - It may cause throw down and then malfunction and accident.
- Do not put metals as like pin and needle into hole and chink of grill, speaker.

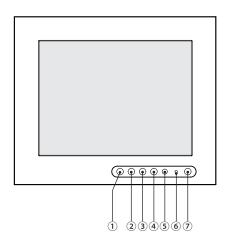
 In case of inserting them, stop to operate, it may cause electronic shock, fire and malfunction.
- Do not use in problem condition as like smoking, smell something burn.
 It may cause fire. Stop to use and make inquiries to agency.
- Do not disassemble, repair and remodeling.
 - It may cause malfunction and injury, can not get warranty.
 - Make inquiries to agent for repair and checkup.

BEFORE USE 8"TFT LCD DIGITAL COLOR MONITOR

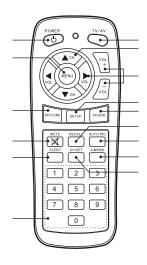
- $\frak{\%}$ To safely use the product, please read the user's manual carefully before use.
- 1) Connect all lines as directed in the product connection map in the manual.
- 2) Use the product at the temperature range of -10° C $\sim 60^{\circ}$ C.
- Screen may be a little dark when the product is operated in low temperature areas. Screen will show normal luminosity after a few minutes.
- 4) When you install the product in a car, do not set a volume level too loud for others to hear outside.
- 5) Quality of pictures on screen may vary depending on the radio field strength in different locations.
- 6) You should use video equipment where you experience weak radio field strength.
- 7) Follow traffic laws when you use the Navigation Route System.

2 SPECIAL FEATURES OF THE PRODUCT 8"TET LCD DIGITAL COLOR MONITOR

- · Digital TFT Wide LCD with high resolution and low reflection
- · All electronic control functions
- Convenient Graphic OSD
- · All functions are displayed on screen (OSD function)
- Auto recognition function of TV signal system (PAL/ NTSC/ AUTO)
- · PC auto adjustment
- 7 Languages on OSD menu (ENG-FRA-DEU-ESP-ITA-JPN-KOR)
- Auto mode selection (DSUB ANALOG, AV, S-VIDEO)
- · One-touch Dimmer (Remote control)
- STAND-BY function
- · Low power consumption



① DOWN	Select the sub menu, decrease the selected function.		
② UP	Select the sub menu, increase the selected function.		
③ MENU	Button to Setup Screen and Function. Press the menu button to be appeared Menu OSD box and press the mode button repeatedly to select the main menu (Picture menu, Setup menu, Audio menu), then press the DOWN or UP button to enter to sub menu, press the mode button repeatedly to highlight icon that user wants, press the DOWN/UP button to increase, decrease or change the function. Push the Menu button once to return to the main menu to select another function or press twice to exit from the OSD.		
④ MODE	AV/S-VIDEO/PC (RGB) selection function. Press the mode button to be appeared source select OSD box and press the DOWN/UP button or mode button repeatedly th press the menu button or wait 3 second to select highlighted source. * If PC picture size does not match with full horizontal or vertical screen		
	size, press the mode button continuously (2~3 second) and wait for a little while then you can see the most appropriate screen.		
⑤ IR-SENSOR	Sensor for receiving signal from the remote control.		
⑥ S/B LED	P.		
⑦ POWER	Power On/Off.		



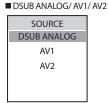
① POWER	Power On/Off
② TV/AV	Select DSUB ANALOG/ EXTERNAL VIDEO/ S-VIDEO
③ ▲▼ CH	Selects channel and moves to MENU
④ MENU	Selects menu and changes function
⑤ ♦ ▶ VOL	Changes MENU level
⑥ PICTURE	Picture selection button
③ SETUP	Setup selection button
® SOUND	No use button
9 MUTE	No use button
10 RECALL	Displays present status
① AUTOPIC	Selects DYNAMIC, NORMAL, MILD, USER for PICTURE
12 SLEEP	No use button
[®] CH.SET	No use button
14 A.MEMO	No use button
ⓑ 0~9 KEY	No use button

5 FUNCTIONS 8"TFT LCD DIGITAL COLOR MONITOR

- * (), it means a remote control button.
- 1 POWER ON/OFF
 - POWER ON/OFF KEY
 - 1) Push POWER(POWER) button. POWER is on.
 - 2) Push POWER(POWER) button again. POWER is OFF.

MODE (TV/AV)

- It is function to change external video signals to DSUB ANALOG/ VIDEO/ S-VIDEO
- DSUB ANALOG/ AV/ S-VIDEO



- SOURCE
 DSUB ANALOG
 AV
 S-VIDEO
- * Adjust it with CH
- * Adjust it with MODE (Key button)
- 3 MENU (MENU)
 - AV/ S-VIDEO

PICTURE	BRIGHTNESS	55 - +		
SETUP	CONTRAST	40 - +		
	SHARPNESS	14+		
	COLORTINT	50 - +		
	COLORTONE	60+		
	SYSTEM	AUTO NTSC PAL		

 * With VOL $\,$, go to SUB MENU. After adjusting in SUB MENU, press MENU to exit.

1) BRIGHTNESS Adjust the brightness of AV/S-VIDEO without affecting DSUB ANALOG's

brightness.

2) CONTRAST Adjust the contrast of AV/S-VIDEO without affecting DSUBANALOG's con-

trast.

3) SHARPNESS Adjust the sharpness of video image.

4) COLOR TINT Change the richness of color.5) COLOR TONE Change the tone of color.

6) SYSTEM Change broadcast system NTSC, PAL, AUTO

■ SETUP (SETUP)

PICTURE	LANGUAGE MENGLISH
SETUP	OSD TIME 10 - +
	TRANSLUCENT 14 - +
	OSD H POS. 50 - +
	OSD V POS. 50 - +
	FACTORY RESET OFF

* With VOL , go to SUB MENU. After adjusting in SUB MENU, press MENU to exit.

1) LANGUAGE Change language English, French, German, Spanish, Italian, Japanese, Korean.

2) OSD TIME The number of seconds that the OSD will remain visible before dis-

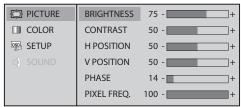
appearing.

3) TRANSLUCENT Change the opaqueness of the background of the OSD.
4) OSD H POS. Move the OSD Window to the horizontal direction.
5) OSD V POS. Move the OSD Window to the vertical direction.

6) FACTORY RESET A factory default reset will clear all of OSD information.

· PC (ANALOG)

■ 🖨 PICTURE



 * With VOL $\,$, go to SUB MENU. After adjusting in SUB MENU, press MENU to exit.

1) BRIGHTNESS Adjust the brightness of DSUB ANALOG without affecting AV/S-VIDEO's

brightness.

trast.

3) H POSITION Adjust the horizontal position of the image.

4) V POSITION Adjust the vertical position of the image.

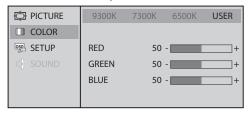
5) PHASE Remove the noises. When phase value is wrong, the image has vertical

lines especially in 1 dot on and off.

6) PIXEL FREQ. Adjust the sampling frequency of DSUB ANALOG signal.

■ COLOR

The tone of color can be changed from red-dish white to bluish white. The individual color components are also user customizable.



* With VOL, go to SUB MENU. After adjusting in SUB MENU, press MENU to exit.



The color temperature could be changed based on the lcd specification.

1) 9300K Change color temperature : Red 42 Green 52 Blue 50 2) 7300K Change color temperature : Red 51 Green 46 Blue 46 3) 6500K Change color temperature : Red 40 Green 54 Blue 54

4) USER User customizable. (RED, GREEN, BLUE)

■ DISPLAY MODES

For the display modes listed below, the screen image has been optimized during manufacture.

MODE	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	Pixel Clock Frequency(MHz)	Sync Polarity (H/V)
	720 x 400	31.469	70.087	28.322	-/+
VGA	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.500	75.000	31.500	-/-
SVGA	800 x 600	37.880	60.300	40.000	+/+
	800 x 600	46.875	75.000	49.500	+/+

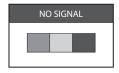
4 RECALL Displays present status.

5 AUTO PIC Select DYNAMIC, NORMAL, MILD, USER for PICTURE
6 TV/AV Select DSUB ANALOG, EXTERNAL VIDEO, S-VIDEO

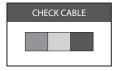
7 OSD MESSAGE



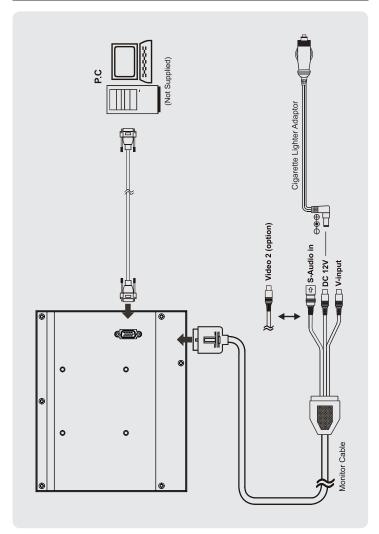
1) The screen shows this when signal is out of range.



2) The screen shows this when there is no signal.



3) The screen shows this when the signal cable is not connected.

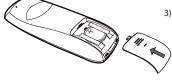




1) Slide and open the battery cover.



2) Insert new battery and ensure that the polarities are correct when inserting. (No. CR2025)



3) Slide and close the battery cover.

ITEM		SPECIFICATION			
		NTSC	PAL		
SIZE		20.32 cm (8.0inch)			
	NUMBER OF PIXELS	800 x 600			
	DOT PITCH	0.2025(W) x 0.2025(H) mm			
LCD PANEL	BRIGHTNESS	250 cd/m ²			
	CONTRAST RATIO	500:1			
	VIEW ANGLE CR≥10	70/ 70/ 60/ 70 (L/R/U/D)			
POWER	VOLTAGE	DC 12V			
SUPPLY	CONSUMPTION	10 Watt AT DC 12V			
INPUT SYSTEM		NTSC/ PAL/ AUTO			
OSD DISPLAY		7 Languages			
INPUT SYNCHRONOUS		TTL Separate, Composite			
FRE-	HORIZONTAL	15.73 KHz	15.63 KHz		
QUENCY	VERTICAL	60 Hz	50 Hz		
INPUT	VIDEO	ANALOG R.G.B 0.7Vp-p			
SIGNAL	VIDEO	Composite Video, S-VIDEO (75 ohm 1Vp-p)			
DIMENSION (W x H x D)		223(W) x 178(H) x 34.5(D) mm			
OPERATING TEMPERATURE		-10° C ~ 60° C			
STORAGE TEMPERATURE		-20° C ~ 70° C			
WEIGHT		1.2 kg (Exclude Monitor Bracket)			

Design and specifications could be changed without notices.

INSTRUCTION MANUAL

